CallFinder® DID

DID-to-Analog Adapter

Model CF220-DID

Cabling Guide

MultiTech Systems

CallFinder DID Cabling Guide
Model CF220-DID

82100292L

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Record of Revisions

Revision	Date	Description
A	06/15/07	Initial release of CF220-DID Cabling Guide.
B	10/02/07	Update support info and fix format.
C	03/14/08	Update mechanical drawing.

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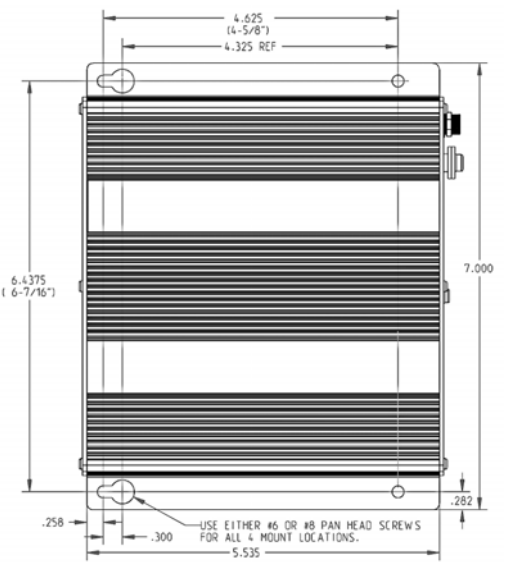
Introduction

This guide describes the hardware setup of the CF220-DID CallFinder unit, and some preliminary considerations for its inter-operation with PBX units. Instructions for software setup can be found in the *User Guide*.

Mechanical Mounting

The CF220-DID CallFinder can be surface mounted with screws spaced according to the dimensions shown.



We Supply

- A CallFinder (CF220-DID) with factory-installed software
- A two-piece 9 Vdc power supply with power cord
- Four common telephone cables (1 for each port; RJ-11 at both ends)
- A product CD that contains: (a) a system management software package for the administrator's PC, and (b) additional documentation for administrators
- This printed *Cabling Guide*

You Supply

- A nearby AC power outlet
- Two nearby connections to a PBX or key phone system
- One or two nearby analog DID trunk lines each with a block of associated DID telephone numbers
- A connection to your Ethernet LAN
- A PC with an Ethernet connection and a web browser from which to configure the CallFinder unit. (Windows or Linux can be used to access the CallFinder software. Windows NT, Windows 2000, or Windows XP is required to access the Device Manager software.)

CallFinder Operation

The CallFinder brings analog DID services to a key telephone system or PBX that is not DID-enabled.

Prerequisite: Ordering the DID Lines

To operate the CallFinder system, you will need one or two DID (Direct Inward Dial) lines in your office. You must order the DID lines from your local telephone operating company (telco). A DID line allows one phone line to be associated with multiple directory numbers. However, only one call can occur on this line at any given time.

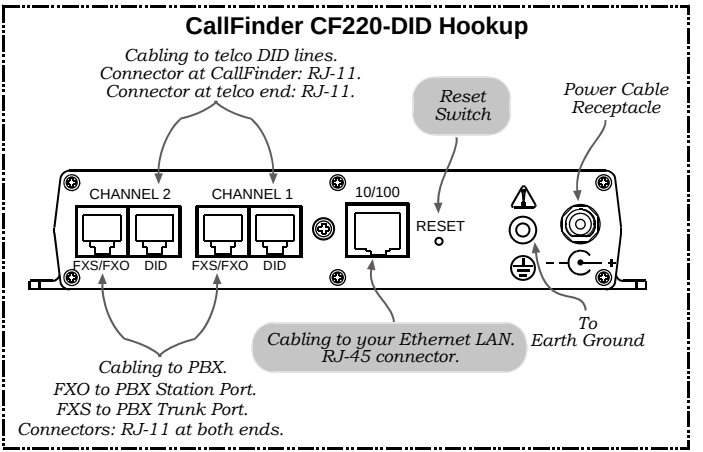
DID lines are sold in groups. For example, a telco in New York City might offer a DID line with a set of 10 directory numbers in the range of 212-555-4100 through 212-555-4109.

When ordering your DID line, ask the telco representative for these details about the DID service. These details will be important when setting up your CF220-DID unit.

Parameter	**Value Required by Telco**
Number of digits used to designate the DID extension (usually 3, 4, 6, or 7)	
Type of "DID Start" used (*wink*, *immediate*, or *delay dial*)	

You will need this information to configure your CallFinder unit later.

Quick Hookup for CF220-DID

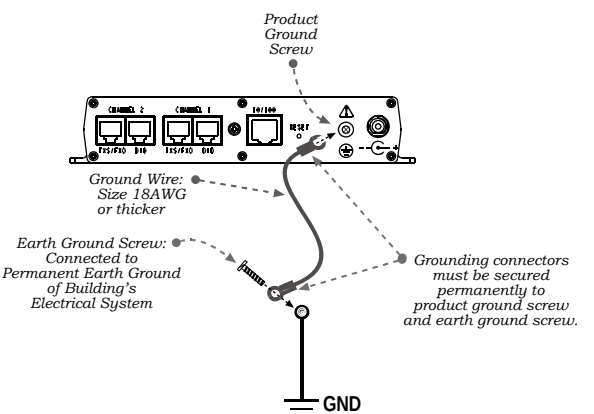


Cabling Instructions

Summary: Place the CallFinder in a convenient location, and then connect it to earth ground, to your AC power outlet, to your Ethernet network, and to your telco DID service. You cannot connect the CallFinder's Extension Ports (FXS/FXO) to your PBX until after you have configured the CallFinder software. In the CallFinder software, you will configure the Extension Ports as either FXS or FXO, and this must be done before they can be connected to your PBX.

Connect CallFinder to Earth Ground

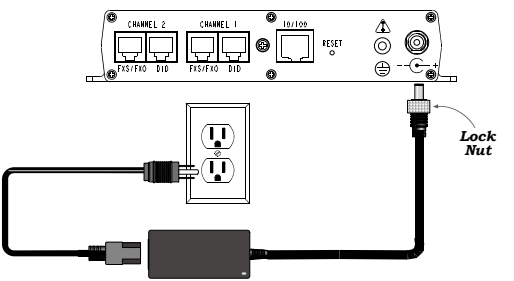
Connect the CallFinder's ground connector to a true earth ground (the ground of your building's electrical system).


Product Ground Screw
Ground Wire: Size 18AWG or thicker
Earth Ground Screw: Connected to Permanent Earth Ground of Building's Electrical System
Grounding connectors must be secured permanently to product ground screw and earth ground screw.
GND

Connect CallFinder to Power

Insert the 9 Vdc power connector into the CallFinder's power receptacle and fasten it with the lock nut. Connect the female end of the AC cord to the power block. Then plug the AC cord into the power outlet.

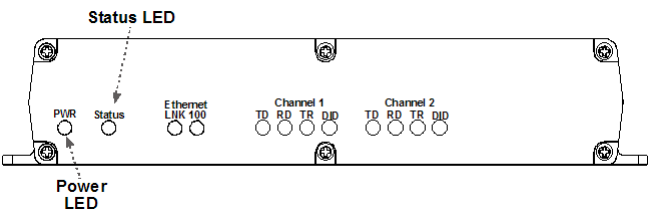
Caution: Use only the 9 Vdc power transformer supplied with the CallFinder. Use of any other transformer voids the warranty and can damage the CallFinder.



Verify powering.

After power is applied, the **PWR** LED comes on immediately but there is a 4-second delay before the **Status** LED comes on. In normal operation, the **Status** LED will be flashing.

When you apply power, the CallFinder performs a diagnostic self-test. The **Status** indicator flashes when the embedded processor is up and running. If the **Status** indicator does not flash, check that the power supply is solidly connected and that the AC outlet is live.

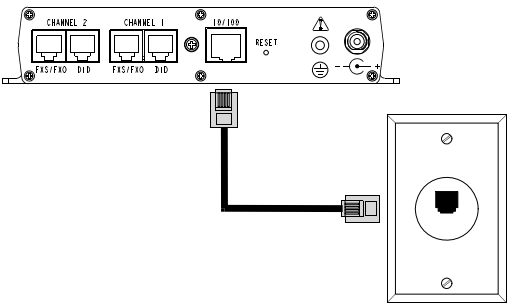


Connect CallFinder to Ethernet Network

Plug one end of your RJ45 Ethernet cable into the CallFinder's Ethernet jack (labeled "10/100") and the other end into your network Ethernet hub. This Ethernet cable is not included with your CallFinder unit.

Note: Before connecting to the Ethernet Network, make sure that the network to which you are connecting the CallFinder is not a *192.168.2.x* subnet.

If it is a *192.168.2.x* subnet, it may clash with the CallFinder because the CallFinder's default IP address is *192.168.2.1*. To remedy such a situation, connect directly from the Admin PC to the CallFinder using an RJ45 cable until the CallFinder's IP address has been configured. Thereafter, connect the CallFinder into the network.



Connect CallFinder to DID Lines

Plug one end of the phone cable into the CallFinder's Channel 1 DID jack and the other end into an analog DID trunk line jack. The DID Line cable is included with your CallFinder.

Caution: Never plug the DID connector into a standard POTS Line. This may damage the CallFinder or the central office equipment. Use only an analog DID Line.

Repeat for the CallFinder's Channel 2 DID port.

Identify CallFinder's Extension Ports (FXS/FXO) for Later Hookup

Caution: You must wait until after the CallFinder software has been configured before connecting the cables between the CallFinder's Extension (FXS/FXO) Ports and the PBX. Because the CallFinder and the PBX can both supply battery power, the cable connections must be done properly. Otherwise equipment damage could occur.

Before making connections to the CallFinder Extension (FXS/FXO) channels, you must know the type of PBX port to which each CallFinder port will be connected and set the "Extension Port" field in the CallFinder **Channel Configuration** screen appropriately.

When connecting to a PBX Station Port, set the CallFinder channel to FXO.

When connecting to a PBX Trunk Port, set the CallFinder channel to FXS.

When the **Channel Configuration | Extension Port** software field has been set properly for both CallFinder channels, you can proceed to connect the cable between each of the CallFinder's FXS/FXO ports and the corresponding PBX port.

Patents

This device is covered by one or more of the following patents: 6,031,867; 6,012,113; 6,009,082; 5,905,794; 5,864,560; 5,815,567; 5,815,503; 5,812,534; 5,809,068; 5,790,532; 5,764,628; 5,764,627; 5,754,589; D394,250; 5,724,356; 5,673,268; 5,673,257; 5,644,594; 5,628,030; 5,619,508; 5,617,423; 5,600,649; 5,592,586; 5,577,041; 5,574,725; D374,222; 5,559,793; 5,546,448; 5,546,395; 5,535,204; 5,500,859; 5,471,470; 5,463,616; 5,453,986; 5,452,289; 5,450,425; D361,764; D355,658; D355,653; D353,598; D353,144; 5,355,365; 5,309,562; 5,301,274. Other patents pending.

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